

A LIST
OF
NORTH AMERICAN LICHENS

ARRANGED ACCORDING TO PROF. E. TUCKERMAN'S
"GENERA LICHENUM"

BY
HENRY WILLEY.

NEW BEDFORD, MASS.

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LIST.

[* Indicates species in my herbarium.

** " species in my collection of New Bedford Lichens.

† " subspecies.

§ " doubtful species.

I shall be glad to obtain by exchange or otherwise, specimens not thus marked.]

TRIBE I. PARMELIACEI (Fr., Eschw.) Tuck.

FAM. 1. USNEEI. Fr.

1. *Roccella* DC.

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| 1. <i>leucophæa</i> Tuck. | Calif. |
| 2. <i>phycopsis</i> Ach. | " Carolinas." |

2. *Ramalina*. Ach., DN.

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| 3. * <i>reticulata</i> Noedh. | West and North West. |
| 4. * <i>Menziesii</i> Tuck. | Calif. |
| 5. <i>alludens</i> Nyl. | Mexico. |
| 6. ** <i>calicaris</i> Fr. | N. Am. |
| varr ** <i>fraxinea</i> Fr.: ib. f. <i>caliciformis</i> Nyl., (Calif.): <i>farinacea</i> Fr.: | |
| ** <i>fastigiata</i> Fr.: † <i>subcalicaris</i> Nyl., (Mexico): <i>canaliculata</i> Fr.: <i>subfastigiata</i> Nyl. | |
| 7. <i>subfraxinea</i> Nyl., f. <i>firmior</i> ib. | Mexico. |
| 8. † <i>polycarpa</i> Mont. | Mexico. |
| 9. <i>polymorpha</i> Ach. | Northern. |
| var. <i>tinctoria</i> Ach. | |
| 10. * <i>pollinaria</i> Ach. | N. Am. |
| 11. * <i>lævigata</i> Fr. | South West. |
| 12. * <i>tenuis</i> Tuck. | South West. |
| 13. * <i>rigida</i> (Pers.) Ach. | Florida. |
| 14. <i>inflata</i> Hook. | Northern and Arctic. |
| 15. <i>minuscule</i> Nyl. | Newfoundland. |
| var. <i>pollinariella</i> ib. | |
| 16. † <i>intermedia</i> Del. | Newfoundland. |
| 17. <i>complanata</i> (Sw.) Ach. | Mexico. |
| 18. * <i>ceruchis</i> (Ach.) DN. | Calif. |
| 19. * <i>homalea</i> Ach. | Calif. |

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| 20. | * <i>Combeoides</i> Nyl. | Calif. |
| 21. | <i>testudinaria</i> Nyl. | Calif. |
| 22. | <i>bistorta</i> Nyl. | Mexico. |
| 23. | <i>cuspidata</i> Ach. | "Am. bor." |
| 24. | <i>Montagnei</i> DN. | "New Orleans." |
| 25. | <i>denticulata</i> Eschw. | Mexico. |
| | var. <i>canalicularis</i> Nyl. | Mexico. |
| 26. | <i>usneoides</i> (Ach.) Fr., var. <i>usneoidella</i> Nyl. | Mexico. |

3. *Dactylina* (Nyl.) Tuck.

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| 27. | <i>ramulosa</i> Hook. | Arctic. |
| 28. | <i>arctica</i> (Hook.) Nyl. | Arctic. |
| 29. | * <i>madrepiformis</i> Wulf. | Rocky Mts. |

4. *Cetraria* Ach., Fr.

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|-----|---|----------------------|
| 30. | * <i>tristis</i> Fr. | Arctic. |
| 31. | * <i>Fahlunensis</i> (L.) Schær. | Alpine. |
| | var. <i>sciastra</i> Fr. | Alpine. |
| 32. | <i>sepincola</i> Ach. | Alpine. |
| 33. | * <i>Californica</i> Tuck. | Calif. |
| 34. | ** <i>Fendleri</i> Tuck. | U. S. |
| 35. | <i>aculeata</i> Fr. | Northern and Arctic. |
| 36. | <i>Richardsonii</i> Hook. | Arctic. |
| 37. | ** <i>Islandica</i> Ach. | Northern and Alpine. |
| | varr. <i>platyna</i> Fr.: <i>crispa</i> Ach. | |
| 38. | <i>nigricans</i> Nyl. | Greenland. |
| 39. | * <i>cucullata</i> Ach. | Alpine. |
| 40. | * <i>nivalis</i> Ach. | Alpine. |
| 41. | ** <i>ciliaris</i> Ach. | N. Am. |
| 42. | <i>orbatum</i> Nyl. | Calif. |
| 43. | <i>chrysantha</i> Tuck. | North West. |
| 44. | ** <i>lacunosa</i> Ach. | N. Am. |
| | var. ** <i>Atlantica</i> Tuck. | Northern. |
| 45. | ** <i>glaucæ</i> Ach. | N. Am. |
| 46. | ** <i>aleurites</i> Ach. | Northern. |
| 47. | ** <i>aurescens</i> Tuck. | Northern. |
| 48. | ** <i>Oakesiana</i> Tuck. | Northern. |
| 49. | ** <i>juniperina</i> Ach. | N. Am. |
| | varr. <i>virescens</i> Tuck.: <i>terrestris</i> Schær.: <i>pinastri</i> Ach.! | |

5. *Evernia* Ach., Mann.

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| 50. | ** <i>furfuracea</i> Mann. | N. Am. |
| | var. ** <i>cladonia</i> Tuck. | Northern. |
| 51. | ** <i>prunastri</i> Ach. | Northern. |
| 52. | <i>divaricata</i> Ach. | Rocky Mts. |
| 53. | * <i>vulpina</i> Wulf. | Rocky Mts. |

6. *Usnea* (Dill.) Ach.

54. ** *barbata* Fr. N. Am.
 varr. ** *florida* Fr.: ** *strigosa* Ach.: ** *hirta* Fr.: ib. f. ** *rubiginosa* (Michx.): *plicata* Ach.: *dasy-poga* Fr.: *ceratina* Schar.
 55. ** *trichodea* Ach. N. Am.
 56. * *longissima* Ach. N. Am.
 57. * *cavernosa* Tuck. U. S.
 58. * *angulata* Ach. U. S.
 59. *aurantio-atra* Jacq. Arctic.

7. *Alectoria* Ach., Nyl.

60. ** *jubata* Fr. N. Am.
 varr. *bicolor* Fr.: *chalybeiformis* Ach.: *implexa* Fr.: *setacea* Ach.
 61. *divergens* (Wahl.) Nyl. Arctic.
 62. * *ochroleuca* Fr. Alpine and Arctic.
 63. *nigricans* Nyl. Arctic.
 64. * *Loxensis* (Fee) Nyl. Mexico.
 65. * *Freimontii* Tuck. Calif.

FAM. 2. PARMELIEI.

8. *Speerschnneidera* Trev.

66. * *euploca* (Tuck.) Trev. Texas.

9. *Theloschistes* (Norm.) Tuck.

67. ** *parietinus* (L., Duf.) Nyl. N. Am.
 varr. *polycarpa* Fr.: ** *lychnea* Schar.: *laciniosa* Duf.: *ramulosa* Tuck.: *Finmarckia* Ach.
 68. ** *chrysophthalmus* (L., DC.) N. Am.
 varr. *pubera* Wallr.: ** *flavicans* ib.: ib. f. *exilis* (Michx.)
 69. * *candelarius* (Ach.) Nyl. N. Am.
 var. ** *stellata* Nyl.

10. *Parmelia* Ach., DN.a. *Glaucescentes*.

70. ** *crinita* Ach. N. Am.
 71. ** *perforata* Ach. N. Am.
 72. † *hypotropa* Nyl. Texas.
 73. ** *perlata* Ach. N. Am.
 varr. *olivetorum* Ach.: *flavicans* Tuck., (Calif.)
 74. ** *tiliacea* Ach. N. Am.
 f. *scortea* Ach. N. Am.
 75. *sulphurata* Nees & Fl. Louisiana.
 76. ** *Borreri* Ach. N. Am.
 var. *rudecta* Tuck.
 77. † *hypoleucites* Nyl. Mexico.

78. *Texana* Tuck. Texas.
 79. ***saxatilis* Ach. N. Am.
 var. rosæformis Ach.: *omphalodes* Fr.
 80. *isidiocera* Nyl. "Am. arct. occid."
 81. ***lævigata* Ach. N. Am.
 var. sinuosa Ach.
 82. *aurulenta* Tuck. Southern.
 83. ***pertusa* Schær. Northern.
 84. ***physodes* Ach. Northern.
 var. enteromorpha Tuck. Northern.
 85. ***colpodes* Ach. U. S.
 86. *cribellata* Tayl. "Am. bor. occid."
 87. *hyperopta* Ach. Greenland.
 88. *encausta* (Sm.) Nyl. Greenland.
 89. *Kantschadalis* Eschw., *var. Americana* Nyl. Mex. & N.W.
 b. Ochrolencæ.
 90. ***caperata* Ach. N. Am.
 91. ***conspersa* Ach. N. Am.
 ***var. stenophylla* Ach. N. Am.
 92. †*leucochlora* Tuck. "Am. bor."
 93. **molliuscula* Ach. Rocky Mts.
 94. (*Everniopsis* Nyl.) *trulla* Ach. Mexico.
 95. **incurva* Fr. Subalpine.
 96. ***ambigua* Ach. U. S.
 97. **centrifuga* Ach. Alpine and subalpine.
 98. § *congruens* Ach. "N. Am."
 c. Olivaceo-fuscae.
 99. ***olivacea* Ach. N. Am.
 varr. prolixa Ach.: *ib. fl. panniformis* Tuck., ***dendritica* Nyl.:
 exasperata (DN.)
 100. **stygia* Ach. Alpine.
 101. *lanata* Nyl. Alpine.
 102. *alpicola* Th. Fr. Greenland.

11. *Physcia* (DC., Fr.) Th. Fr.

103. **ciliaris* Ach., *var. angustata* Tuck. Northern.
 104. *erinacea* Ach. Calif.
 105. ***aquila* (Ach.) Nyl., *var. detonsa* Tuck. N. Am.
 106. ***pulverulenta* (Schreb.) Nyl. Northern.
 var. pityrea Fr.
 107. ***speciosa* (Wulf., Fr.) N. Am.
 varr. stellata Tuck.: *granulifera* *ib.*: ***hypoleuca* Ach.: *podocarpa*
 Tuck.: *galactophylla* *ib.*: *leucomela* (Eschw.)
 108. *Leana* Tuck. Northern.
 109. *dilatata* Nyl., † *integra* *ib.* "Mexico."
 110. *callosa* Nyl. "Calif."
 111. ***stellaris* (L.) Nyl. N. Am.
 varr. aipolia Schær: ***astroidea* Tuck.: *Domingensis* *ib.*: ***tri-*
 bacia Fr.: *hispida* *ib.*

112. ** *cæsia* (Hoffm.) Nyl. Northern.
 varr. *stellata* Fr.: *tribacia* ib.: *tenella* ib.
 113. * *applanata* (Fee) Nyl. Southern.
 114. * *major* Nyl. "Mexico."
 115. ** *obscura* (Ehrh.) Nyl. N. Am.
 varr. ** *ciliata* Tuck.: ** *erythrocardia* ib.: ** *adglutinata* Schær.:
 ib. f. ** *syncolla* Nyl.

12. *Pyxine* Fr.

116. *cocoës* (Sw.) Nyl. Louisiana.
 var. ** *sorediata* Tuck. N. Am.

FAM. 3. UMBILICARIEI.

13. *Umbilicaria* Hoffm.

a. *Patellatæ*.

117. *mammulata* Ach. South and Mid.
 118. ** *Pennsylvanica* Hoffm. N. Am.
 119. ** *pustulata* Hoffm. N. Am.
 var. *papulosa* Ach.
 120. *anthracina* (Schær.) Fr. Alpine.
 varr. *tessellata* Schær.: *intricata* ib.
 121. * *polyphylla* Hoffm. Alpine.
 var. *deusta* Fr.
 122. * *proboscidea* DC. Alpine.
 varr. *tornata* Ach.: *arctica* ib.
 123. *cylindrica* Ach. Alpine.
 124. * *hirsuta* Ach. Alpine.
 var. *depressa* Tuck.
 125. *vellea* (L.) Th. Fr. "Am. bor."
 126. ** *Dillenii* Tuck. N. Am.
 127. *rugifera* Nyl. Calif.
 128. *murina* DC. Calif.

b. *Lirellatæ*.

129. * *hyperborea* Hoffm. Alpine.
 130. * *erosa* Hoffm. Alpine.
 131. ** *Muhlenbergii* Ach. U. S.
 132. *angulata* Tuck. Calif.
 133. *phæa* Tuck. Calif.
 134. *Semitensis* Tuck. Calif.
 135. *Wenckii* Mull. Greenland.
 136. *Koldeneweyi* Kbr. (nomen.) Greenland.
 137. *Tramniziana* Kbr. (nomen.) Greenland.

FAM. 4. PELTIGEREI.

14. *Sticta* (Schreb.) Delis., Fr.

1. *Stictina* Nyl.

138. * *anthraspis* Ach. Northern.

139. ** *crocata* Ach. Southern, Mass.
 140. *Humboldtii* Hook. Mexico.
 141. *gyalocarpa* Nyl., var. *hirta* ib. Mexico.
 142. *tomentosa* Ach. Mexico.
 143. * *quercizans* Ach. U. S.
 144. ** *fuliginosa* Ach. Mass.
 145. * *sylvatica* Ach. N. Y.

2. *Sticta*.

146. ** *pulmonaria* Ach. N. Am.
 147. *linita* Ach. Northern.
 148. ** *scrobiculata* Ach. Northern.
 149. *laciniata* Ach. "Mexico."
 var. *laviuscula* Nyl. "Mexico."
 150. † *Orizabana* Nyl. "Mexico."
 151. *endochrysa* Del., † *Feei* Nyl. "Am. bor."
 152. ** *aurata* Ach. N. Am.

3. *Ricasolia* DN.

153. ** *glomulifera* Delis. N. Am.
 154. *intermedia* Nyl. "Mexico."
 155. *herbacea* Ach. "Am. bor."
 156. *dissecta* Ach. Mexico.
 157. *corrosa* Ach. Mexico.
 158. *subdissecta* Nyl. Mexico.
 159. *crenulata* Del., var. *stenospora* Nyl. "Southern."
 160. * *Ravenelii* Tuck. Southern.

15. *Nephroma* Ach.

161. * *arcticum* Ach. Alpine.
 162. ** *lævigatum* Ach. N. Am.
 var. ** *parile* Ach. N. Am.
 163. *sublævigatum* Nyl. "Mexico."
 164. ** *tomentosum* (Hoffm.) Kbr. N. Am.
 var. *Helveticum* Schær.

16. *Peltigera* (Willd., Hoffm.) Fee.

165. * *malacea* Ach. Alpine.
 166. ** *aphthosa* Hoffm. N. Am.
 varr. *marginalis* Tuck.: *minor* ib. N. Am.
 167. ** *canina* Hoffm. N. Am.
 varr. *spongiosa* Tuck.: *sorediifera* ib.: *spuria* Ach.: *membranacea* Nyl.
 168. *leptoderma* Nyl. S. Car.
 169. ** *polydactyla* Hoffm. N. Am.
 var. *scutata* Fr.
 170. ** *rufescens* Hoffm. N. Am.
 171. ** *horizontalis* Hoffm. Northern.
 172. * *venosa* Hoffm. Northern.

17. *Erioderma* Ach.173. *polycarpum* Fee.

"Mexico."

18. *Solorina* Ach.174. * *crocea* Ach.

Arctic.

175. * *saccata* Ach.

Northern.

var. *spongiosa* Nyl.

Newfoundland.

FAM. 5. PANNARIEL.

19. *Heppia* Næg.176. * *Despreauxii* Mont.

U. S.

20. *Pannaria* (Del.) Tuck.1. *Psoroma* Ach.177. * *hypnorum* Fr.

Alpine.

178. ** *lanuginosum* (Ach.) Kbr.

N. Am.

2. *Eupannaria*.179. ** *rubiginosa* Ach.

U. S.

var. ** *conoplea* Del.180. * *pannosa* Del.

Southern.

181. * *nigro-cincta* (Mont.) Nyl.

Southern.

182. ** *lurida* Nyl.

U. S.

183. ** *tryptophylla* Ach.

U. S.

var. ** *Schraderi* Schær.184. *Hookeri* (Sm.) Th. Fr.

Greenland.

185. ** *microphylla* (Sw.) Del.

N. Am.

186. ** *leucosticta* Tuck.

U. S.

187. *crossophylla* Tuck.

Vermont.

188. ** *brunnea* (Sw.) Mass.

N. E.

189. *cyanolepra* Tuck.

Calif.

190. *lepidiota* Th. Fr.

Greenland.

191. * *granatina* (Smf.) Th. Fr.

N. E.

192. *hæmatopis* (Th. Fr.) Tuck.

Greenland.

193. *pholidota* (Mont.) Nyl.

Mexico.

3. *Endocarpiscum* Nyl.194. * *Bolanderi* Tuck.

Calif.

195. * *Guepini* Delis.

U. S.

4. *Coccocarpia* Nyl.196. * *plumbea* Ach.

Mt. Desert.

197. *molybdæa* Pers.

Southern.

var. ** *cronia* Tuck.

U. S.

198. *stellata* Tuck.

S. Car.

199. § *Micheneri* Tuck.

Pa., N. Car.

5. *Lecothecium* Trev.200. * *nigra* (Huds.) Nyl.

U. S.

var. * *cæsia* Nyl.

N. Y.

201. flabellosa Tuck. Vermont.
 202. * Petersii Tuck. Ala., N. Y.
 203. ** byssina (Hoffm.) Tuck. U. S.

FAM. 6. COLLEMEI.

Subfam. 1. Lichinei.

21. Ephebe Fr., Born.

204. ** pubescens Fr. Northern.
 205. ** solida Born. U. S.
 206. Lesquereuxi Born. Ala.

22. Lichina Ag., Mont.

207. ** confinis (Mull.) Ag. (?) Mass.

Subfam. 2. Eucollemei.

23. Synalissa (Fr., Nyl.) Tuck.

1. Fruticulosæ.

208. symphorea DC. Ala.
 209. * Texana Tuck. Texas.

2. Granuloso-corallinae.

210. Schaereri Mass. Illinois.
 211. ** polycocca Nyl. N. E.
 212. ** phæococca Tuck. U. S.
 213. ** phylliscina Tuck. Mass.
 214. * lignyota Wahl. Kansas.
 215. § riparia Arn. Vermont.

[Several sp. undetermined.]

24. Omphalaria Dur. & Mont.

216. ** phyllisca (Wahl., Nyl.) Tuck. Northern.
 217. Girardi D. & M. Ala.
 218. pyrenoides Nyl. Texas.
 219. * umbella Tuck. Ala.

25. Collema (Hoffm.) Fr., Fl.

1. Collemella Tuck.

220. * cladodes Tuck. N. Y.

2. Lathagrium Ach.

221. * myriococcum (Ach.) Nyl. N. Y.
 222. ** pycnocarpum Nyl. U. S.
 223. ** cyrtaspis Tuck. U. S.
 224. * laciniatum Nyl. Ala., Kansas.
 225. ** microphyllum Ach. Mass., Ill., N. Y.
 226. * callibotrys Tuck. Southern.

227. ** verruciforme Ach. Mass., Ill.
 228. ** leptaleum Tuck. U. S.
 229. implicatum Nyl. Mexico.
 230. glaucophthalmum Nyl. Mexico.
 231. aggregatum Nyl. Mexico.
 232. ** microptychium Tuck. Mass., N. Y.
 233. ** flaccidum Ach. U. S.
 234. ** nigrescens (Huds.) Ach. U. S.
 var. ** leucopepla Tuck.
 235. *† rysssoleum Tuck. U. S.
 3. Eucollema.
 236. coccophorum Tuck. Mex., Calif.
 237. Texanum Tuck. Texas.
 238. ** pulposum (Bernh.) Ach. U. S.
 var. ** crispum Ach.
 239. * tenax Ach. U. S.
 240. * limosum (Ach.) Nyl. Illinois.
 241. melænum Ach. Greenland.
 242. cristatellum Tuck. S. West, Calif.
 243. * furvum (Ach.) Nyl. Northern.
 244. § grauosum (Wulf.) Schær. Ohio.
 245. pustulatum Ach. Pa.
 246. stenophyllum Nyl. U. S.
 247. plicatile Ach. N. Y.

26. Leptogium Fr., Nyl.

1. Polyschidium Ach.
 248. intricatulum Nyl. N. E.
 249. dendriscum Nyl. Florida.
 250. * muscicola (Sw.) Fr. U. S.
 2. Lathagrium Ach.
 251. * albo-ciliatum Desmaz. Calif.
 252. adpressum Nyl. Mexico.
 3. Euleptogium.
 253. ** subtile Nyl. U. S.
 254. ** minutissimum Flk. Mass., Ill.
 255. ** lacerum (Sw.) Fr. U. S.
 varr. lophæum Nyl.: bolacinum Schær.
 256. scotinum Ach., Fr. Calif.
 var. platynum Tuck. Calif.
 257. palmatum (Huds.) Mont. N. West.
 258. * Apalachense Tuck. Southern.
 259. * dactylinum Tuck. U. S.
 260. * crenatellum Tuck. Vermont.
 261. ** pulchellum (Ach.) Nyl. U. S.
 262. Burgessii (Lightf.) Mont. N. E.
 263. ** tremelloides Fr. U. S.
 varr. azureum Sw., (Southern): foveolatum (Nyl.) ib.: cyaneus Ach.: microphyllum Tuck.

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| 264. | * marginellum (Sw.) Mont. | S. West. |
| 265. | ** chloromelum (Sw.) Nyl. | U. S. |
| 266. | * bullatum (Ach.) Nyl. | Mexico. |
| 267. | * phyllocarpum Nyl., var. isidiosum ib. | Mexico. |
| 268. | * corrugatulum Nyl. | Mexico. |
| 269. | inflexum Nyl. | Mexico. |
| 270. | myochroum (Ehrh., Schær.) var. ** saturninum
(Dicks.) Tuck. | N. Am. |

27. Hydrothyria Russell.

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| 271. | * venosa Russell. | U. S. |
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FAM. 6. LECANOREI.

Subfam. 1. Eulecanorei.

28. Placodium (DC.) Næg. & Hepp.

1. Thamnona Tuck.

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| 272. | * coralloides Tuck. | Calif. |
| 273. | * cladodes Tuck. | Calif. |

2. Amphiloma Fr.

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| 274. | fulgens DC. | Nebraska. |
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varr. bracteatum Hoffm.: alpinum Th. Fr.

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| 275. | geophilum Th. Fr. | Greenland. |
| 276. | ** elegans DC. | N. Am. |
| 277. | ** murorum (Hoffm.) DC. | Northern. |

varr. miniatum Fr.: citrinum Nyl.

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| 278. | callopismum Ach. | Rocky Mts. |
| 279. | * galactophyllum Tuck. | Kansas. |
| 280. | eugyrum Tuck. | Texas. |
| 281. | peliophyllum Tuck. | Calif. |
| 282. | variabile (Pers.) Nyl. | Rocky Mts. |

3. Callopisma DN.

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|------|-----------------------------|------------|
| 283. | bolacinum Tuck. | Calif. |
| 284. | ** sideritis Tuck. | N. E. |
| 285. | ** vitellinum (Ehrh.) Ach. | N. Am. |
| 286. | crenulatum Th. Fr. | Greenland. |
| 287. | luteo-minium Tuck. | Calif. |
| 288. | fusco-luteum (Smf.) Th. Fr. | Greenland. |
| 289. | fulvo-luteum Nyl. | Greenland. |
| 290. | * rupestre (Scop.) Nyl. | U. S. |
| 291. | * cinnabarinum (Ach.) Anz. | U. S. |
| 292. | ** cerinum Ach. | N. Am. |

varr. ** hæmatites Fr.: * stillicidiorum Ach.

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| 293. | ** aurantiacum (Lightf.) | N. Am. |
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varr.

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| 294. | sinapispermum (DC.) Hepp. | Arctic and Western. |
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295. ** *ferrugineum* (Huds.) N. Am.
 var. ** *nigricans* Nyl.
 296. ** *camptidium* Tuck. Southern, Mass.
 297. *diphassium* Tuck. " Texas.
 298. *Floridanum* Tuck. Florida.
 299. *Groenlandicum* Kbr. (nomen.) Greenland.

29. *Lecanora* Ach.

1. *Cladodium* Tuck.

300. * *Bolanderi* Tuck. Calif.
 301. * *thamnitidis* Tuck. Calif.
 302. *phryganitidis* Tuck. Calif.

2. *Squamaria* DC.

303. *crassa* DC. (*or lentigera* ib.) Nebraska.
 304. ** *Frostii* Tuck. U. S.
 305. *straminea* Wahl. Greenland.
 306. *gelida* (L.) Ach. Greenland.
 307. *thamnoplaca* Tuck. Nevada.
 308. ** *rubina* Ach. N. Am.

varr. *peltata* Tuck.: *opaca* ib.

309. *Haydeni* Tuck. Nebraska.
 310. ** *muralis* (Schreb.) Schær. N. Am.

varr. *Garovaglii* Anz.: *versicolor* Nyl.

3. *Eulecanora*.

a. Spores simple.

311. ** *pallescentis* Fr. N. Am.
 var. *parella* Fr.: ** *rosella* Tuck.
 312. ** *tartarea* Ach. N. Am.
 var. *frigida* Ach.
 313. ** *atra* Ach. N. Am.
 314. * *frustulosa* (Dicks.) Ach. Vermont, Arctic.
 315. ** *subfusca* Ach. N. Am.

varr. *discolor* Fr.: *distans* ib.: and others undetermined.

316. * *cenisia* Ach. Vt., Greenland, Calif.
 317. § *coniza* Tuck. Vt.
 318. ** *Hageni* Ach. N. Am.
 319. ** *sambuci* (Pers.) Nyl. Mass.
 320. ** *albella* Ach. N. Am.

varr. ** *angulosa* Fr.: ** *cæcio-rubella* (Ach.)

321. *badia* Fr. Alpine.
 322. *phæobola* Tuck. Calif.
 323. ** *varia* Fr. N. Am.

varr. *symmicta* Ach.: ** *sepincola* Fr.: * *polytropa* ib.: ** *aitema* (Ach.)

324. *carneo-lutescens* Nyl. "Mexico."
 325. *pinguis* Tuck. Calif.

326. *atro-sulphurea* (Wahl.) Ach. Greenland.
 b. Spores 2 - 4-locular.
327. *** athroocarpa* Dub. Mass., Calif., Western.
 328. *Brunonis* Tuck. Calif.
 c. Spores fusiform, plurilocular.
329. ** ventosa* Ach. Alpine.
 330. *hæmatomma* Ach. "Am."
 331. *** elatina* Ach. Northern.
 *var. ** ochrophæa* Tuck. Northern.
 332. ** punicea* Ach. Southern.
 333. *§ cismanica* Belt. Vt.
4. *Aspicilia* Mass.
 334. ** cinerea* (L.) Am.
 varr.
335. *calcareæ* (L.) Greenland.
 336. ** melanaspis* (Wahl.) Ach. Kansas.
 337. ** verrucosa* (Ach.) Laur. Arctic, Calif.
 338. *oculata* (Dicks.) Ach. Arctic.
 339. *glaucoma* (Hoffm.) Ach. "Mexico."
 340. *glaucomela* Tuck. Calif.
 341. *amphorella* Nyl. "Mexico."
5. *Acarospora* Mass.
 342. ** molybdina* (Wahl.) Ach. Arctic, Mt. Desert.
 343. ** chlorophana* (Wahl.) Ach. Greenland, Texas.
 344. ** xanthophana* Nyl. South and West.
 345. *Schleicheri* (Ach.) Nyl. Calif.
 346. *cervina* (Pers.) Smf. N. Am.
 varr. glaucocarpa Smf.: *squamulosa* Fr.: *** discreta* ib.: *privigna* Ach., *ff. simplex* Kbr., *** clavus* DC.: ** pruinosa* Ach.: *glebosa* Kbr.
347. *thamnina* Tuck. Calif.
 348. *peliscypha* (Wahl.) Th. Fr. Calif.
 349. *§ Carestia* DN. Calif.

30. *Rinodina* Mass., Stitz.

1. *Dimelæna* Norm.
 350. *nimbosa* Fr. Greenland.
 351. *** oreina* (Ach.) Mass. N. Am.
 352. *** chrysomelæna* (Ach.) Tuck. Southern, Mass.
2. *Eurinodina*.
 353. *** sophodes* (Ach.) Mass. N. Am.
 *varr. ** confragosa* Nyl.: *** polyspora* (Th. Fr.): *** exigua* Nyl.
354. *** ascociscana* Tuck. Northern.
 355. *turfacea* (Wallr.) Kbr. Alpine.
 356. *mniaræa* (Ach.) Th. Fr. Alpine.
 357. *Bischoffi* (Hepp) Kbr. South and West.
 358. ** sabulosa* Tuck. Calif.
 359. *Pantschiana* Kbr. (nomen.) Greenland.

360. * *constans* Nyl. 3. Maronea Mass. U. S.

Subfam. 2. *Pertusariei* Nyl.

31. *Pertusaria* DC.

361. ** *pertusa* Ach. N. Am.
 var. *areolata* Fr.
 362. ** *leioplaca* Ach. N. Am.
 varr.
 363. † *assimilans* Nyl. "Mexico."
 364. *bryontha* (Ach.) Nyl. Arctic.
 365. *dactylina* (Ach.) Nyl. Arctic.
 366. ** *velata* Turn. N. Am.
 367. ** *multipuncta* (Sm.) Nyl. N. Am.
 368. *lecanina* Tuck. Calif.
 369. ** *pustulata* Anz. N. Am.
 370. * *Wulfenii* DC. Northern.
 371. ** *globularis* Ach. U. S.
 372. *glomerata* Ach. Alpine, Arctic.
 373. *porinella* Nyl. "Mexico."
 374. *concreta* Nyl. "Am. bor. & occ."
 375. * § *rhexostoma* Nyl. "Am. bor."
 376. *globulifera* Sm. Am.
 b. *Varicellaria* Nyl. *
 377. *rhodocarpa* Kbr. Arctic.

32. *Phlyctis* Wallr.

378. * *argena* (Wallr.) Kbr. N. Y.

Subfam. 3. *Urceolariei*.

33. *Conotrema* Tuck.

379. ** *urceolatum* Tuck. N. Am.

[34. *Dirina* (Fr.) Mass.]

35. *Gyalecta* (Ach.) Anzi.

380. ** *radiatilis* Tuck. N. E.
 381. ** *lutea* Dicks. N. E.
 382. ** *pineti* (Schrad.) Fr. U. S.
 383. *absconsa* Tuck. S. Car.
 384. ** *corticola* Lonnr. Mass.
 385. *Flotovii* Kbr. Mass.
 386. *rhexoblephara* (Nyl.) Arctic.
 387. * *cupularis* Schær. U. S.
 388. *odora* Ach. N. E.

36. *Urceolaria* (Ach.) Fl.

389. ** *scruposa* Smf. N. Am.
 varr. ** *bryophila* Ach.: *parasitica* Smf.: ** *th. lutescente*, (Mass.)
 390. * *actinostoma* Pers. U. S.
 391. § *hybocarpa* Tuck. Ohio.

37. *Thelotrema* (Ach.) Eschw.

392. * *lepadinum* Ach. N. Am.
 393. ** *subtile* Tuck. U. S.
 394. *granulosum* Tuck. Louisiana.
 395. *cavatum* (Ach.) Nyl. Texas.
 396. *Domingense* (Fee) Nyl. Southern.
 397. *rhodostroma* (Mont.) Tuck. Louisiana.
 398. *monosporum* Nyl. Louisiana.
 399. * *Auberianum* Mont. Florida.
 400. *Santense* Tuck. Southern.
 401. *Ravenelii* Tuck. Southern.
 402. * *glaucescens* Nyl. Southern.
 403. *Wightii* Nyl. Southern.
 404. *leprocarpum* Nyl. Louisiana.

38. *Gyrostomum* Fr.

405. * *scyphuliferum* (Ach.) Fr. Southern.

Incertæ sedis.

39. *Myriangium* M. & B.

406. ** *Curtissii* M. & B. U. S.

TRIBE II. LECIDEACEI Fr.

FAM. 1. CLADONIEI (Zenk., Kbr.) Th. Fr.

40. *Stereocaulon* Schreb.

407. * *tomentosum* Fr. Northern.
 408. *Depreaultii* Del. "Newfoundland."
 409. * *coralloides* Fr. Alpine.
 410. ** *paschale* Laur. N. Am.
 411. † *myriocarpum* Th. Fr. Mexico.
 412. ** *condensatum* Laur. Northern.
 413. † *cereolinum* Ach. "Mont. Alb."
 414. * *denudatum* Flk. Northern.
 415. * *nanodes* Tuck. Alpine.
 416. *Wrightii* Tuck. N. West.
 417. *chlorellum* Tuck. N. West.
 418. *claviceps* Tuck. Mexico.
 419. * *ramulosum* Ach. Mexico.
 420. *sphærophoroides* Tuck. N. Car.
 421. *mixtum* Nyl. Mexico.

41. *Pilophorus* Th. Fr.

422. *acicularis* (Ach.) Tuck. Alpine and Arctic.
 ff. * *fibula* Tuck.: *robustus* Th. Fr.

42. *Cladonia* Hoffm.

1. *Thallus crustaceus*.
 423. ** *papillaria* (Ehrh.) Hoffm. N. Am.
 2. *Cladoniae solitæ*.
 A. *Phaeocarpæ*.
 a. *Macrophyllæ*.
 424. *endiviæfolia* (Ach.) Fr. Florida.
 425. ** *alcicornis* Fr. Northern.
 b. *Non macrophyllæ*.
 a. *Podet. scyphophoris*.
 426. ** *pyxidata* Fr. N. Am.
 varr. *pocillum* Ach.: ** *cæspiticia* (Flk.): ib. f. ** *epiphylla* Tuck.
 427. ** *cariosa* Flk. Northern.
 428. ** *fimbriata* Fr. N. Am.
 varr. *tubæformis* Fr.: *radiata* ib.: ** *adpersa* Tuck.
 429. ** *gracilis* Fr. N. Am.
 varr. ** *verticillata* Fr.: *cervicornis* Schær.: ** *hybrida* Fr.: ** *clon-
 gata* ib.: ** *symphycarpa* Tuck.
 430. * *vermicularis* Ach. Alpine.
 431. * *cornuta* Fr. Northern.
 432. * *decorticata* Flk. Northern.
 var. *symphycarpa* Fr.
 433. * *degenerans* Flk. N. Am.
 var. *pleolepis* Nyl.
 434. *carneola* Fr. Arctic.
 var. *cyanipes* Fr.
 b. *Podet. ascyphis*.
 435. § *botrytes* Hoffm. N. Y.
 436. ** *mitrula* Tuck. U. S.
 437. *athelia* Nyl. Mexico.
 438. * *Santensis* Tuck. Southern, Calif.
 439. ** *lepidota* Fr. U. S.
 440. ** *turgida* Hoffm. Northern.
 441. ** *furcata* Flk. N. Am.
 varr. ** *crispata* Flk.: ** *cristata* Fr.: ** *racemosa* Flk.: ** *subu-
 lata* ib.: * *pungens* Ach.
 442. ** *cenotea* Schær. Northern.
 varr. *turgida* Fr.: *furcellata* ib.
 442a. ** *squamosa* Hoffm. N. Am.
 varr. ** *parasitica* Schær.: *ventricosa* Fr.: *attenuata* ib.
 443. ** *rangiferina* Hoffm. N. Am.
 varr. ** *sylvatica* Flk.: ** *alpestris* ib.

444. ~~**~~uncialis Fr. N. Am.
 var. adunca Ach.: humilior Schær.
 445. **†lacunosa Del. Northern.
 446. *†Caroliniana Tuck. S. Car.
 447. *amaurocræa Fr. Alpine.
 B. Erythrocarpæ.
 448. **cornucopioides Fr. Northern.
 var. pleurota Nyl.
 449. *bellidiflora Schær. Northern.
 var. Hookeri Tuck.
 450. *deformis Hoffm. Alpine.
 451. digitata Hoffm. Alpine.
 452. **macilenta Hoffm. N. Am.
 var. **filiformis Fr.: clavata ib.
 453. muscigena Eschw., var. *pulchella Tuck. Southern.
 454. leptopoda Nyl. Mexico.
 455. cetrarioides Schwein. Southern.
 456. **cristatella Tuck. U. S.
 var. **ramosa Tuck.: **ochrocarpia ib.
 457. **leporina Fr. Southern.

FAM. 2. CŒNOGONII.

43. Cœnogonium Ehrenb.

458. Linkii Ehrenb. Mexico.
 459. interpositum Nyl. Louisiana.

44. Cystocoleus Thwaites.

460. rupestris (Pers.) Thw. N. Car.

FAM. 3. LECIDEEI.

Subfam. 1. Bæomycei Fee.

45. Bæomyces Fee.

461. **roseus Pers. N. Am.
 462. *fungoides (Sw.) Ach. Mexico.
 463. **byssoides Fr. U. S.
 var. rupestris Fr.: lignatilis ib.
 464. *æruginosus Scop. N. Am.
 465. absolutus Tuck. Southern.
 466. *placophyllus Fr. Alpine.

Subfam. 2. Biatorei Fr.

46. Biatora Fr.

1. Thallus squamulose. Psora Hoffm.
 467. *decipiens Fr. Western, Calif.

468. * *crenata* Tayl. Texas.
 469. * *icterica* Mont. Texas.
 470. * *Russellii* Tuck. U. S.
 471. * *globifera* (Ach.) Fr. Arctic, Calif.
 472. *luridella* Tuck. Rocky Mts.
 473. ** *rufo-nigra* Tuck. U. S.
 474. * *scotopholis* Tuck. Calif.
 475. * *ostreata* (Hoffm.) Kbr. N. E.

2. *Eubiatora*. a. Spores simple.

476. ** *coarctata* (Ach.) Th. Fr. U. S.
 477. § *microps* Tuck. Southern.
 478. § *recedens* Nyl. Southern.
 479. *glebulosa* Fr. Calif.
 480. ** *decolorans* (Hoffm.) Fr. U. S.
 481. ** *flexuosa* Fr. U. S.
 482. ** *viridescens* (Schrad.) Fr. U. S.
 483. * *Friesiana* Linds. Greenland.
 484. ** *vernalis* Fr. Northern.
 485. * *parvifolia* Pers. Southern.
 486. *russula* (Ach.) Mont. Southern, N. Y.
 487. *cinnabarina* (Smf.) Th. Fr. Arctic.
 488. ** *sanguineo-atra* Fr. U. S.
 489. *cuprea* (Smf.) Fr. Arctic.
 490. * *atro-rufa* Fr. Alpine.
 491. *castanea* Hepp. Arctic.
 492. *rufo-fusca* Anzi. Arctic.
 493. *Tornoensis* (Nyl.) Th. Fr. Arctic.
 494. * *fuscescens* (Smf.) Fr. Arctic.
 495. ** *exigua* (Chaub.) Fr. Arctic.
 496. ** *Nylanderi* Anz. N. Am.
 497. ** *uliginosa* (Schrad.) Fr. Mass.
 498. ** *rivulosa* (Ach.) Fr. U. S.
 Northern.

varr. *mollis* Wahl.: ** *Lightfootii* Nyl.

499. * *quernea* (Dicks.) Th. Fr. Calif.
 500. ** *lucida* Fr. Northern, Arctic.
 501. *mutabilis* Fee. Mexico.
 502. *aurigera* Fee. "Am. bor."
 503. § *chloropholis* Tuck. Pa.
 504. *furfuracea* Kremph. "Mexico."

b. Spores 2-locular. *Biatorina* Mass.

505. ** *cyrtella* Ach. U. S.
 506. *cumulata* (Smf.) Greenland.
 507. *globulosa* Flk. Alpine.
 508. ** *miliaris* (Wallr.) Mass.
 509. § *anomala* Fr. U. S.
 510. ** *denigrata* Fr. N. E.
 511. ** *mixta* Fr. Northern.
 512. ** *atro-purpurea* Mass. N. Am.
 513. *erysibe* Fr. Rocky Mts.

c. Spores fusiform, 4-plurilocular. Bilimbia, DN.

514. **trachona Fl. N. E.
 var. **corticola. Mass.
 515. leucoblephara Nyl. Southern.
 516. tricholoma Mont. S. Car.
 517. artyta Ach. N. West.
 518. **sphæroides Smf. Arctic.
 var. obscurata Smf. Greenland.
 519. **hypnophila Turn. U. S.
 520. **milliaria Fr. Northern.
 var. **ligniaria Fr.
 521. cupreo-rosella (Nyl.) Tuck. N. Y.
 522. **§ peziza Mont. Mass.

d. Spores acicular, plurilocular. Bacidia DN.

523. **rubella Fr. N. Am.
 varr. **spadicea (Ach.): **suffusa Fr.: Schweinitzii Tuck.: **incompta Nyl.: ib., f. **muscorum ib.: atro-grisea (Del.): **inundata Fr.: **arceutina (Ach.)
 524. †stigmatella Tuck. Louisiana.
 525. **umbrina Ach. U. S.
 var. **asserculorum Kbr.
 526. **chlorosticta Tuck. U. S.
 var. **substipitata Tuck. Mass.
 527. **chlorantha Tuck. Northern.
 var. **saxicola. N. E.

e. Thekes polysporous. Biatorella DN.

528. *campestris Fr. Illinois.
 529. *fossarum (Duf.) Mont. N. J., Illinois.
 530. *cyphalea Tuck. Illinois.
 531. **ilicis Willey. Mass.
 532. **geophana Nyl. N. J., Mass.
 533. **resinæ Fr. N. E.

[Several sp. undetermined.]

47. Heterothecium (Fl.) Tuck.

534. *sanguinarium (L., Fl.) Tuck. Alpine.
 535. endochroma Fee. Mexico.
 536. tuberculosum (Fee) Fl., var. **porphyritis Tuck. N. E.
 var. pachycheila Tuck. Southern.
 537. Domingense (Pers.) Fl. Southern.
 538. leucoxanthum (Spreng.) Southern.
 539. **pezizoideum (Ach.) Fl. Northern.
 540. conspersum (Fee) Fl. Ala.
 541. nannarium Tuck. Texas.

Subfam. 3. Eulecideei.

48. *Lecidea* (Ach., Fr.)1. Th. effigurate. *Thalloedema* Mass.

542. *candida* (Web.) Ach. Arctic.
 543. *vesicularis* (Hoffm.) Ach. Alpine.

2. *Eulecidea*. α . Spores simple.

544. ** *albo-cœrulescens* Fr. Northern.
 var. ** *immersa* Fr. Mass.
 545. ** *contigua* Fr. N. Am.
 546. *variegata* Fr. Arctic.
 547. ** *enteroleuca* Fr. N. Am.

varr. *olivacea* Fr.: *theioplaca* Tuck.: *muscorum* Hepp: *arenaria*
 Fl.: ** *latypæa* (Ach.) Nyl.

548. *vitellinaria* Nyl. Rocky Mts., Arctic.
 549. *parasitula* Nyl. Behring St.
 550. *pallida* Th. Fr. Arctic.
 551. *borealis* Kbr. N. West.
 552. *turgidula* Fr. Arctic, Calif.
 553. ** *melancheima* Tuck. Northern.
 554. * *arctica* Smf. Alpine.
 555. *diapensiæ* Th. Fr. Alpine.
 556. *lapicida* Ach. Alpine.
 557. ** *Myrini* (Fr.) U. S.
 558. ** *spilota* (Fr.) U. S.
 559. *polycarpa* Flk. Northern.
 560. *auriculata* Th. Fr. Greenland.
 561. *amylacea* (Ach.) Nyl. Greenland.
 562. *aglaea* Smf. Alpine.
 563. *Armeniaca* (DC.) Fr. Greenland.
 564. *atro-brunnea* (DC.) Schær. Rocky Mts., Arctic.
 565. * *confluens* Schær. Alpine.
 566. * *fusco-atra* (Ach.) Fr. Arctic, Alpine.
 567. *insularis* Nyl. Calif.
 568. *tenebrosa* Fl. Alpine.
 569. *lugubris* (Smf.) Nyl. Alpine.
 570. *panœola* (Ach.) Fr. Alpine.
 571. § *subepulotica* Nyl. "N. E."

b. Spores 2-plurilocular. *Toninia* Mass.

572. ** *acclinis* Fl. Mass.
 573. ** *declinis* Tuck. Mass.
 574. *caudata* Nyl. Alpine.
 575. * *granosa* Tuck. U. S.
 576. * *massata* Tuck. Calif.
 577. *squalida* (Schleich.) Ach. Arctic.
 578. *caulescens* Anz. Calif.
 579. *ruginosa* Tuck. Calif.
 580. *flavo-virescens* (Dicks.) Borr. Alpine.
 581. § *grossa* Pers. "Am."

c. Thekes polysporous. Sporastatia Mass.

582. morio (DC.) Schær. Alpine.

[Several sp. undetermined.]

49. Buellia (DN.) Tuck.

1. Th. effigurate. Catolechia Fl.

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|---------------------------|-----------------|
| 583. epigæa Pers. | Nebraska. |
| 584. radiata Tuck. | Calif. |
| 585. badia (Fr.) Kbr. | Calif. |
| 586. pulchella (Schrad.) | Alpine, Arctic. |
| 587. scabrosa (Arn.) Kbr. | Arctic. |

2. Eubuellia.

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| 588. **lactea Mass. | N. Am. |
| 589. **lepidastra Tuck. | N. E. |
| 590. stellulata Tayl. | N. J., Calif. |
| 591. **atro-alba (Fl.) | N. Am. |

var. **chlorospora Nyl.

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|-------------------------------|-----------------|
| 592. pullata Tuck. | Calif. |
| 593. coracina (Moug.) Th. Fr. | Alpine, Arctic. |
| 594. *halonia Ach. | Calif. |
| 595. papillata Smf. | Arctic. |
| 596. **parasema (Ach.) Kbr. | N. Am. |

varr. cæsio-pruinosa Nyl.: triphragmia ib.

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|---------------------|--------------|
| 597. **dialyta Nyl. | N. E., N. Y. |
|---------------------|--------------|

var. **ligniaria.

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|-----------------------|--------|
| 598. **myriocarpa DC. | Mass. |
| | N. Am. |

var. **polyspora.

- | | |
|-------------------------|--------------|
| 599. **Schæreri DN. | Mass. |
| 600. **turgescens Nyl. | N. E., N. J. |
| 601. **Elizæ Tuck. | N. E. |
| 602. **vernico-ma Tuck. | Va., N. E. |
| | U. S. |

var. **corticola.

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| 603. **myrmecina (Fr.) | Mass. |
| 604. saxatilis (Schær.) Kbr. | N. E. |
| 605. *inquilina Tuck. | Vt. |
| 606. *parasitica (Flk.) Th. Fr. | Calif. |
| 607. *albo-atra (Hoffm.) Nyl. | Calif. |
| | N. Am. |

var. *saxicola Fr.

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|---------------------------|------------|
| 608. *oidalea Tuck. | Calif. |
| 609. †penichra Tuck. | Calif. |
| 610. Paysii Kbr. (nomen.) | Greenland. |
| 611. ** — | Mass. |
| 612. ** — | Mass. |

3. Spores muriform. Rhizocarpon DC.

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| 613. Bolanderi Tuck. | Calif. |
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614. ** *petræa* (Fl.) Tuck. N. Am.
 ff. *vulgaris* Tuck.: *geminata* (Nyl.): *Montagnei* (Fl.): *varr. lævata*
 Fr.: * *Oederi* (Kbr.): ** *obscurata* (Schær.)
 615. * *geographica* (L.) Th. Fr. Alpine.
 616. * *alpicola* (Nyl.) Anz. Alpine.

TRIBE III. GRAPHIDACEI Eschw., Nyl.

FAM. 1. LECANACTIDEI Stitz.

50. *Lecanactis* (Eschw., Kbr.) Tuck.

617. * *abietina* (Ach.) Kbr. Arctic, Calif.
 618. * *premnea* Ach. S. and West.
 var. * *chloroconia* Tuck. N. E., N. Y.

51. *Platygrapha* Nyl.

619. ** *periclea* Nyl. Mass., N. H.
 620. *Californica* Tuck. Calif.
 621. *ocellata* Nyl. Southern.
 622. *Ravenelii* Tuck. Southern.

52. *Melaspilea* Nyl.

623. * *arthonioides* (Fee) Nyl. Mass.
 624. * *angulosa* Nyl. Texas.

FAM. 2. OPEGRAPHEI Stitz.

53. *Opegrapha* (Humb.) Ach., Nyl.

625. *tribulodes* Tuck. Texas.
 626. ** *demissa* Tuck. Mass.
 627. ** *levidensis* Willey. Mass.
 628. *oulocheila* Tuck. N. Car.
 629. * *microcycilia* Tuck. N. E.
 630. ** *varia* (Pers.) Fr. N. Am.
 varr. *diaphora* Fr.: ib. f. ** *chlorina* ib.: *notha* Fr.: *signata* ib.:
pulicaris ib.: *rimalis* ib.
 631. ** *atra* (Pers.) Nyl. U. S.
 var. *hapalea* Ach. N. E.
 632. ** *vulgata* (Ach.) Nyl. U. S.
 var. ** *lithyrga* (Ach.) Mass.
 633. *Bonplandi* Fee. S. Car.
 634. ** *viridis* Pers. U. S.
 635. *astræa* Tuck. S. Car., Tex.

54. *Xylographa* Fr., Nyl.

636. ** *opegraphella* Nyl. N. E., N. Y.

637. * parallela Nyl.
 638. ** —

N. E.
 Mass.

55. Graphis Ach., Nyl.

639. ** scripta Ach.

N. Am.

varr. ** limitata Schar.: ** recta ib.: ** serpentina ib.: tenella (Ach.)
 Nyl.: sophistica (Nyl.) Texas: assimilis (Nyl.) N. E.

640. eulectra Tuck.

N. E., Ill.

641. elegans (Sm.) Ach.

Southern.

var. * striatula (Ach.)

Southern.

642. rigida (Fee) Nyl., var. enteroleuca Nyl.

Texas.

643. Pavoniana Fee.

Texas.

644. ** dendritica Ach.

U. S.

varr. ** inusta (Ach.): ** medusula Nyl.

645. sculpturata Ach.

Louisiana.

646. tricola Ach.

Texas.

647. * erumpens Nyl.

Southern.

648. hololeucoides Nyl.

"Mexico."

649. * patellula (Meissn.) Nyl.

Southern.

650. scolecites Tuck.

Ala.

651. * Afzelii Ach.

Southern.

652. leprocarpa Nyl.

"Louisiana."

653. Babingtonii (Mont.) Tuck.

Southern.

654. nitida (Eschw.) Nyl.

Southern.

FAM. 3. GLYPHIDEI (Fr.) Mont.

56. Chiodecton Ach.

655. * rubro-cinctum Nyl.

Louisiana.

656. Montagnæi —

Louisiana.

57. Glyphis Ach., Mont., Nyl.

657. * Achariana Tuck.

Southern.

FAM. 4. ARTHONIEI Kbr.

58. Arthonia Ach., Nyl.

A. Fruit pale.

658. * cinnabarina (DC.) Wallr.

U. S.

659. chiodectella Nyl.

Louisiana.

660. ** pyrrhula Nyl.

U. S.

661. * rubella (Fee) Nyl.

Southern.

662. conturbata Nyl.

Mexico.

663. platyspeilea Nyl.

Mexico.

664. leucastræa Tuck.

Texas.

665. impolita (Ehrh.) Borr.

Calif.

666. ** glaucescens Nyl.

U. S.

667. ** velata Nyl., f. develata ib.

U. S.

668. * pruinosa Ach. "Am. bor."
 669. * cinereo-pruinosa Schær. N. E.
 670. ** cupressina Tuck. Mass.
 671. ** lecideella Nyl. U. S.

B. Fruit black.

a. Spores 2-locular.

672. glebosa Tuck. Calif.
 673. * lurida Ach. N. E.
 674. ** patellulata Nyl. N. E.
 675. ** dispersa Nyl. Mass.

b. Spores 4-plurilocular.

676. ** diffusa Nyl. N. E.
 677. lurido-alba Nyl. N. E.
 678. ** astroidea (Ach.) Nyl. N. Am.

varr. ** epipasta (Ach.): ** macularis Fr.

679. ** punctiformis Ach.
 680. ** varians Dav. Mass.
 681. mediella Nyl. Greenland.
 682. ramosula Nyl. N. Am.
 683. oxytera Nyl. Mexico.
 684. polymorpha Ach. Southern.
 685. * atrata Fee. Texas.
 686. complanata Fee. Texas.
 687. platygraphidea Nyl. Mexico.

c. Spores muriform.

688. interveniens Nyl. S. Car.
 689. ** tædiosa Nyl. U. S.
 690. ** anastomosans Ach. N. E.
 691. ** spectabilis Fl. U. S.
 692. mesoleuca Nyl. Mexico.

[Several sp. undetermined.]

59. Mycoporum (Fl.) Nyl.

693. ** pycnocarpum Nyl. U. S.

60. Agyrium Fr.

694. ** rufum (Pers.) Fr. Mass.

TRIBE IV. CALICIACEI.

FAM. 1. SPHÆROPHOREI.

61. Siphula Fr.

695. ceratites (Wahl.) Fr. N. West.
 696. simplex (Tayl.) Nyl. N. West.

62. *Sphærophorus* Pers.

- | | | |
|------|------------------------------|-----------------|
| 697. | <i>compressus</i> Ach. | Alpine, Arctic. |
| 698. | * <i>globiferus</i> (L.) DC. | Alpine, Arctic. |
| 699. | * <i>fragilis</i> (L.) Pers. | Alpine, Arctic. |

63. *Acroscyphus* Lev., Mont.

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|------|-----------------------------|---------|
| 700. | <i>sphærophoroides</i> Lev. | Mexico. |
|------|-----------------------------|---------|

FAM. 2. CALICIEI.

64. *Acolium* (Fee) DN.

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|------|---|------------|
| 701. | * <i>Bolanderi</i> Tuck. | Calif. |
| 702. | <i>Californicum</i> Tuck. | Calif. |
| 703. | * <i>Carolinianum</i> Tuck. | S. Car. |
| 704. | <i>tympanellum</i> (Ach.) DN. | Calif. |
| 705. | <i>chloroconium</i> Tuck. | Calif. |
| 706. | * <i>viridulum</i> (Schær.) DN. | N. E. |
| 707. | ** <i>tigillare</i> (Ach.) DN. | N. Am. |
| 708. | * <i>Javanicum</i> (M. & V. d. B.) Stitz. | Louisiana. |

65. *Calicium* Pers., Ach., Fr.1. *Cyphelium* DN.

- | | | |
|------|---|-----------|
| 709. | ** <i>trichiale</i> Ach. | N. E. |
| 710. | ** <i>brunneolum</i> Ach. | Northern. |
| 711. | ** <i>stemoneum</i> Ach. | Mass. |
| 712. | <i>phæocephalum</i> (Turn.) Turn. & Borr. | Northern. |
| | var. ** <i>aciculare</i> (Fr.) Nyl. | Mass. |
| 713. | ** <i>chrysocephalum</i> (Turn.) Ach. | Northern. |

2. *Calicium* DN.

- | | | |
|------|--|----------------|
| 714. | ** <i>curtum</i> Turn. & Borr. | N. E. |
| 715. | ** <i>subtile</i> Fr. | U. S. |
| 716. | **† <i>albo-nigrum</i> Nyl. | N. E. |
| 717. | ** <i>lenticulare</i> (Hoffm., Ach.) | N. E. |
| | var. <i>sub-cinereum</i> Nyl. | N. E. |
| 718. | ** <i>pusillum</i> Flk. | N. E. |
| 719. | * <i>fuscipes</i> Tuck. | N. J., Canada. |
| 720. | ** <i>trachelinum</i> Ach. | U. S. |
| 721. | <i>hyperellum</i> Ach., Wahl. | Calif. |
| 722. | <i>roscidum</i> (Flk.) Nyl., var. ** <i>trabinellum</i> Nyl. | Northern. |
| 723. | <i>disseminatum</i> Fr. | N. E. |
| 724. | * <i>citrinum</i> (Leight.) Nyl. | N. E. |
| 725. | <i>Ravenelii</i> Tuck. | S. Car. |
| 726. | ** <i>Curtissii</i> Tuck. | U. S. |
| 727. | ** <i>byssaceum</i> Fr. | U. S. |

3. *Sphinctrina* DN.

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|------|---|-------|
| 728. | ** <i>microcephalum</i> (Sm.) Turn. & Borr. | N. E. |
|------|---|-------|

729. ** tubiforme Mass. U. S.
 730. leucopodium Nyl. Va.
 731. ** turbinatum Pers. N. Am.

66. Coniocybe Ach.

732. ** furfuracea (L.) Ach. Northern.
 733. * pallida (Pers.) Fr. Northern.
 734. ** albella Schwein. N. Car., (Mass.?)

TRIBE V. VERRUCARIACEI (Fr., Fee) Stitz.

FAM. 1. ENDOCARPEI Th. Fr.

67. Endocarpon Hedw., Fr.

735. ** miniatum (L.) Schær. N. Am.
 varr. ** complicatum Schær.: fulvo-fuscum Tuck.: Manitense ib.:
 ** aquaticum Schær.: Muhlenbergii (Ach.)
 736. Moulinsii Mont. Texas.
 737. ** arboreum Schwein. U. S.
 738. * rufescens Ach. S. and West.
 739. ** hepaticum Ach. N. Am.
 740. cinereum (Pers.) var. cartilagineum Nyl. Greenland, Calif.
 741. ochroleucum Tuck. Calif.
 742. ** pusillum Hedw. U. S.

68. Normandina Nyl.

743. Jungermanniae Delis. Southern, Calif.
 744. læte-virens Turn. N. E.

FAM. 2. VERRUCARIEI.

Subfam. 1. Segestrii.

69. Segestria Fr.

745. lectissima Fr. N. E.
 746. * nucula Fr. Southern.

70. Staurothole Norm.

747. * Drummondii Tuck. Canada, N. Y.
 748. * circinata Tuck. N. Y.
 749. ** diffractella (Nyl.) Tuck. U. S.
 750. umbrina (Wahl.) Tuck. N. E.
 var. ** clopima (Nyl.) N. E.

Subfam. 2. Trypetheliei.

71. *Trypethelium* Spreng., Ach.

751.	uberoides Nyl.	"Mexico."
752.	* cruentum Mont.	Southern.
753.	* scoria (Fee)	Southern.
754.	pallescens (Fée) Nyl.	Southern.
755.	catervarium (Fee) Tuck.	Southern.
756.	scorites (Tuck.) Nyl.	N. Car.
757.	exocanthum Tuck.	Southern.
758.	** virens Tuck.	N. Am.
759.	Sprengelii Ach.	Louisiana.

Subfam. 3. Pyrenulei.

72. *Sagedia* (Mass., Kbr.) Tuck.

760.	** chlorotica (Ach.) Mass.	U. S.
761.	heteropsis (Nyl.)	"Mexico."
762.	** Cestrensis Tuck.	U. S.
763.	** lactea Kbr.	U. S.
764.	** oxyspora (Nyl.) Tuck.	N. E.

73. *Verrucaria* (Pers.) Tuck.

a. Spores simple.

765.	** epigæa (Pers.) Ach.	U. S.
766.	** maura (Wahl.) Th. Fr.	Northern.
	var. aractina Th. Fr.	Greenland.
767.	ceuthocarpa Wahl.	Greenland.
768.	** mucosa (Wahl.) Th. Fr.	N. E.
769.	** striatula Wahl.	Mass.
770.	* pinguicola Mass.	N. Y.
771.	* papillosa (Ach.) Kbr.	N. Y.
772.	** margacea (Wahl.) Nyl.	N. E., N. Y.
	var. **æthiobola Wahl.	N. E.
773.	** nigrescens Pers.	N. Am.
	var. *eleochroa Tuck.: †viridula (Ach.)	
774.	* fuscella Fr.	U. S.
775.	** virens Nyl.	U. S.
776.	** rupestris Schrad.	U. S.
	var. purpurascens Schær.	Ala.
777.	* muralis Ach.	U. S.
778.	tartaricola Linds.	Greenland.

[Several sp. undetermined.]

b. Spores 2-4-plurilocular.

779.	Nylanderi Hepp, var. Hudsonana ib.	N. Y.
780.	** —	Mass.
781.	pyrenophora Ach., Nyl.	U. S.

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|------|---------------------|---------|
| 782. | microbola Tuck. | Canada. |
| | c. Spores muriform. | |
| 783. | terrestris Th. Fr. | Arctic. |

74. *Pyrenula* (Ach., Næg. & Hepp) Tuck.

a. Spores decolorate, except 784 & 785.

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|------|--|------------|
| 784. | <i>pygmæa</i> (Kbr.) Tuck. | Greenland. |
| 785. | ** <i>thelena</i> (Ach.) Tuck. | U. S. |
| | var. ** <i>micula</i> (Fl.) | U. S. |
| 786. | ** <i>punctiformis</i> (Ach.) Næg. | U. S. |
| | var. <i>fallax</i> Nyl. | |
| 787. | * <i>quinque-septata</i> (Nyl.) Tuck. | Southern. |
| 788. | * <i>subcinerea</i> (Nyl.) Tuck. | Southern. |
| 789. | * <i>cinchonæ</i> (Ach.) Tuck. | Southern. |
| 790. | <i>subprostans</i> (Nyl.) Tuck. | Southern. |
| 791. | ** <i>gemmata</i> (Ach.) Næg. | Northern. |
| 792. | * <i>tropica</i> (Ach.) Tuck. | Southern. |
| 793. | ** <i>hyalospora</i> (Nyl.) Tuck. | U. S. |
| | b. Spores colored. | |
| 794. | * <i>aggregata</i> Fee. | Southern. |
| 795. | <i>ochraceo-flava</i> (Nyl.) | "Mexico." |
| 796. | ** <i>leucoplaca</i> (Wallr.) Kbr. | Northern. |
| 797. | ** <i>glabrata</i> (Ach.) Mass. | U. S. |
| 798. | * <i>mamillana</i> (Ach.) var. <i>Santensis</i> (Nyl.) | Southern. |
| 799. | ** <i>nitida</i> Ach. | N. Am. |
| | var. <i>nitidella</i> Flk. | Southern. |
| 800. | * <i>pachycheila</i> Tuck. | Southern. |
| 801. | <i>thelomorpha</i> Tuck. | N. Car. |
| 802. | ** <i>lactea</i> (Mass.) Tuck. | U. S. |
| 803. | <i>geminella</i> Ach. | Mexico. |
| 804. | § <i>spinulosa</i> Schwein. | N. Car. |

75. *Pyrenastrum* Eschw.

- | | | |
|------|---------------------------|-----------|
| 805. | * astroideum (Fee) Eschw. | Southern. |
| 806. | Ravenelii Tuck. | S. Car. |

76. *Strigula* Fr.

- | | | |
|------|---------------------------------------|-----------|
| 807. | <i>* complanata</i> (Fee, Mont.) Nyl. | Southern. |
| 808. | <i>actinoplaca</i> Nyl. | Mexico. |

PSEUDO-LICHENS.

1. *Abrothallus* DN.

809. ** *Smithii* Tul. Mass.
810. ** *oxysporus* Tul. Mass.

2. *Celidium* Tul.811. ** *stictarum* Tul.

N. E.

NOTE.—In giving specific names, the compiler does not wish to be understood as undertaking to decide that the plants referred to are actually distinct species. He only records them as having been published as such.

ERRATA. Strike out one * at Nos. 56, 118, 211. Insert one at Nos. 58, 100, 124, 131, 387, 414, 461, and two at Nos. 234, 360, 444, 631.



